Form K1810 (Revised) (138) Printed in Gt. Britain This book should be careful preserved for reference.

INSTRUCTIONS /-

FOR USING

SINGER SEWING MACHINES

No. 99

LOCK STITCH, FOR FAMILY USE

When requiring Needles, Oil, Parts or Repairs for your machine



Look for the Red "S" There are Singer Shops in every City

THE SINGER MANUFACTURING CO.

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IMPORTANT

To obtain the best results from your sewing machine, it is necessary to use the best quality of oil and good needles.

Singer Oil, which is specially prepared for sewing machines, is supplied in tins which have the well-known Singer Red "S" printed thereon.

Singer Needles are stamped with the Company's Trade Mark "Simanco" and are sold in green packets which also bear the Singer Red Letter "S."

Needles in Containers marked "For Singer Machines" are not Singer made needles.

To avoid trouble, be sure to purchase your Oil and Needles from a Singer Shop or Singer Salesman.

Form K1810 (138) Printed in Great Britain

INSTRUCTIONS

FOR USING

SINGER SEWING MACHINES

No. 99

WARNING

It is essential that the machine should be kept well oiled, in accordance with the instructions given on page 14 of this book. Should your machine require overhauling or repair, apply only to a Singer Shop or Singer Salesman, otherwise you will risk its being irretrievably damaged.

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DO YOU KNOW THAT LITTLE SINGER MOTOR?



One screw attaches it to your machine

Cuts out all fatigue!

Makes sewing a pleasure!

Better work done in half the time!

And then-after dark, that Little

SINGERLIGHT

—by showing the stitching more clearly prevents eyestrain and saves time and annoyance when threading the needle

> Any Singer Shop or Singer Salesman will tell you all about them

The Hand Attachment



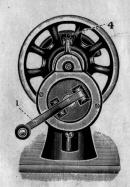


Fig. 1.

Fig. 2.

HEN the wooden cover is removed from the machine, the hand attachment will be found to be out of working position, as shown in Fig. 1. To operate the machine, pull the small spring stud (2, Fig. 1) and turn the handle back until the lever (1, Fig. 1) enters the socket (3, Fig. 1); also see that the hinged finger (4, Fig. 2) is turned back between the spokes of the wheel. The machine will then be ready for working, as shown in Fig. 2.

Before replacing the wooden cover, the lever should be disengaged, and the handle placed in the position shown in Fig. 1.

Balance Wheel Stop Motion.

This device allows the balance wheel to run free,



so that bobbins may be wound, and correct treadling acquired without operating the mechanism. To loosen the wheel, hold it with the left hand, and with the right hand turn the stop motion screw over towards 'you, as shown in Fig. 3.

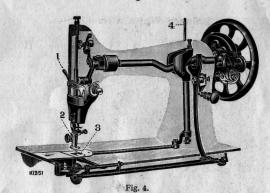
Fig. 3.

To Operate the Hand Machine.

Tighten the balance wheel, and after placing a piece of material under the presser foot (2, Fig. 4) turn the handle from you with an easy and regular motion. Continue to do this until you are able to guide the material correctly with the left hand.

To Operate the Treadle Machine.

Loosen the balance wheel, place both feet upon the treadle, and turn the balance wheel towards you, at the same time allowing the feet to move freely and lightly with the motion of the treadle. Continue to do this until a regular and easy movement is acquired and you are able to work the treadle so that the machine re-starts without the balance wheel turning in the wrong direction.



When familiar with the working movement, tighten the balance wheel by turning the stop motion screw from you, and place a piece of calico or cloth under the presser foot (2, Fig. 4). Lower the presser foot upon the material by means of the presser bar lifter (1, Fig. 4) and again work the machine, without it being threaded, until you have

The advantages of a treadle machine, compared with a hand machine, are: a greater speed can be attained, and, both hands being free, a greater variety of work can be accomplished.

become accustomed to guiding the material.

To Ensure Perfect Action of the Machine.

The balance wheel must always turn towards you. The presser footmust beraised, except when sewing.

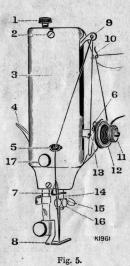
Do not work the machine with the bobbin case (1, Fig. 8) and needle threaded, except when sewing.

The slide (5, Fig. 8) must be kept closed.

To Thread the Needle

(See Fig. 5).

Pass thread from reel through wire guide (10), down under and from right to left between the



tension discs (12), over the small spring (6) at left of the discs, under the slack thread regulator *(13), up and from right to left through the hole (9) in take-up lever, down into the eyelet (5) into the wire guide (7), then from left to right through the eye of the needle, leaving an end of thread three or four inches long when the thread take-up lever (9) is at its highest point.

*NOTE.—For darning and embroidery work, pass the thread through the hole in the slack thread regulator (13), instead of under it.

For threading the needle, use the Singer Needle Threader. It saves time, trouble and patience.

To Set the Needle

(See Fig. 5).

Raise the needle bar (14) to its highest point and loosen the thumb screw (15); hold the needle with the left hand and, with its flat side towards the balance wheel, insert it into the needle clamp (16) as far as it will go; then tighten the thumb screw.

To Take Out the Bobbin.

Draw the slide (5, Fig. 8) to the left and press the forefinger of the right hand upon the bobbin ejector, as shown in Fig. 6. This will raise the bobbin so that it can be easily taken out.



Fig. 6.

To Wind the Bobbin

(See Fig. 7).

Loosen the balance wheel and place a reel of thread on the spool pin. Pass the end of the thread through the wire guide (10, Fig. 5), then into the lower eyelet (5) of the thread guide from below,



and into the notch (2) at its top. Now thread the bobbin by passing the thread through the hole in its left disc from the inside, and with the left hand press it on to the bobbin winder spindle (1) and hold. Then with the right hand, turn the small pulley (6) until the hole in the right disc of the bobbin is engaged by the pin in the spindle shoulder. Press the pulley against the ledge of the balance

wheel until the latch retains the winder in position; hold the free end of the thread and proceed to wind by turning the balance wheel towards you; then, after a few turns, break off the end of thread and again operate the treadle, as in sewing, until the bobbin is filled. The winder stops automatically when the bobbin is full.

If through any cause the pressure of the rubber ring against the ledge of the balance wheel is insufficient for winding the bobbin, loosen the screw (3) and press the winder lightly until the rubber ring is in contact with the ledge; then tighten the screw.

To Replace the Bobbin in the Bobbin Case (See Fig. 8).

Take the bobbin between the thumb and forefinger of the right hand, with the end of the thread drawing from the top to the left, and in this position replace it in the bobbin case, as shown in



Fig. 8.

case, as shown in Fig. 8. With the left hand draw the thread into the slot (3), back between the spring and side of the bobbin case until it reaches the notch (4); then across the bobbin towards the needle. Thereafter close the slide (5).

To Clean the Stitch-forming Mechanism.

If the stitch-forming mechanism should become clogged with lint and interfere with the perfect operation of the machine, remove the bobbin case, as described in the following instructions, and dislodge the lint accumulated in the machine.

To Remove the Bobbin Case

(See Fig. 9).

Raise the needle to its highest point, and remove the slide (5, Fig. 8) by raising its front edge.

Insert the nail of the left forefinger under the latch "B" and raise the latter on to the edge at "A." Hold the bobbin case, between the thumb and forefinger of the left hand, at the edge nearest the latch "B,"

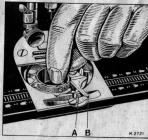


Fig. 9.

as shown in Fig. 9, and lift it out towards you.

Under no circumstances must the screw in latch "B" be loosened, as this would put the stitch-forming mechanism out of adjustment.

To Replace the Bobbin Case.



Fig. 10.

Raise the needle to its highest point, with the latch (B, Fig. 10) in the position illustrated. Hold the bobbin case, between the forefinger and thumb of the left hand, at the edge farthest from the forked part (as shown in Fig. 10), and insert it beneath the

throat plate so that the fork straddles the position stud; then, with a slight twisting motion of the fork to the left and to the back, lightly press it down until the edge of the sewing hook engages in its groove.

Having correctly inserted the bobbin case, move the latch (B, Fig. 10) into the notch to hold the bobbin case in position, and then replace the slide from the right, as shown in Fig. 11, being careful to see that the two ends of the flat spring (A, Fig.

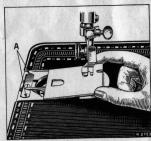


Fig. 11.

11) enter the grooves on the underside of the slide.

To Prepare for Sewing.

With the left hand hold the end of the needle thread, leaving it quite slack from the hand to the needle; turn the balance wheel towards you until the

needle moves down and up again to its highest point, thus catching the under thread; then pull the end of the needle thread you are holding, and the under thread will be brought up with it through the needle hole in the throat plate, as shown in Fig. 12. Place both ends of thread and material to be sewn

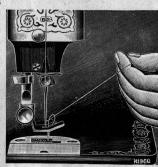


Fig. 12.

under the presser foot and needle, lower the presser bar lifter and commence to sew by turning the balance wheel towards you.

NOTE.—Do not try to help the feeding of the work by pulling the material, as this may deflect the needle and cause it to break. The machine feeds without any assistance

To Remove the Work.

Raise the take-up lever (9, Fig. 5) to its highest point by turning the balance wheel towards you, and lift the presser foot; then move the material back and to the left, and sever the threads by passing them over the thread cutter above the presser foot. Leave the ends of the threads a few inches long under the presser foot.

To Regulate the Tensions.



Correct Stitch.

For ordinary stitching, the tension on the upper and under threads should be equal, and just sufficiently strong to lock both threads in the centre of the work, as shown in the above illustration.

If either tension is stronger than the other, imperfect stitching will be the result, thus:



Needle thread tension too strong.



Needle thread tension too weak.

A correct stitch can usually be obtained by varying the tension on the needle thread (see Fig. 13).—To increase the tension, turn the



Nut.

Fig. 13.

thumb nut in the direction illustrated by the arrow, or to lessen the tension, turn the nut in the opposite direction. All machines are correctly adjusted before leaving the factory, and it is therefore seldom necessary to alter the under tension. Should it become necessary to do so, however, tighten the tension spring screw (2, Fig. 8) on the left hand side of the bobbin case to increase the tension, or loosen the screw slightly to lessen the tension.

Care should be taken to use thread and needles suitable for the material being sewn (see Table on inside of back cover).

To Alter the . Length of Stitch.

Turn the thumb screw inwards (see Fig. 14) to lengthen the stitch, or turn outwards to shorten it.



Fig. 14.

To Change the Pressure on Material.

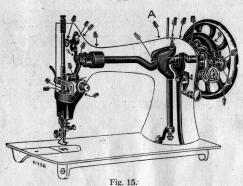
For ordinary family sewing it is seldom necessary to change the pressure on the material. If sewing fine silk or flimsy material, lighten the pressure by giving the thumb screw (1, Fig. 5) two or three turns upwards. If it be found necessary to increase the pressure, give the thumb screw a few turns downwards.

To Turn a Corner.

Stop the machine when the needle is rising, but before it is out of the material; raise the presser foot and turn the work, using the needle as a pivot. Then lower the presser foot again.

To Sew Flannel or Bias Seams.

Use a short stitch and as light a tension as possible, so as to leave the thread loose enough to withstand the strain of stretching the goods.



To Oil the Machine and Stand.

All moving parts in contact must be covered with a film of oil and not allowed to become dry. Oil should always be applied at the points indicated by arrows in Figs. 15 and 16, a drop of oil being sufficient at any place. To oil the needle-bar mechanism, remove the face plate (3, Fig. 5) by unscrewing the knurled screw (17, Fig. 5) and loosening the small screw (2, Fig. 5). It is most important that oil should be applied at the point marked "A" (Fig. 15) when the take-up lever (9, Fig. 5) is at its lowest point. When oiling, insert the oil can spout well into the oil holes. Apply a drop of oil to the small piece of felt lubricating the oscillating hook and to the rollers at the right of the hook shaft. There are also two holes in the hand attachment to which oil should be applied occasionally.

After oiling, run the machine rapidly for a few minutes so that the oil may penetrate into the bearings. If in constant use, the machine should be oiled two or three times a week. Neglect to do this will shorten the life of your machine and cause you trouble and annoyance.

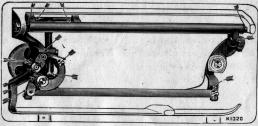


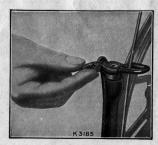
Fig. 16.

To oil the stand, apply a drop of oil to the centres upon which the band wheel and treadle work, and to both ends of the pitman rod which connects the treadle with the band wheel.

Always use the best oil, as sold only at Singer Shops. Inferior oil clogs the bearings, prevents efficient working, and causes rapid wear of the mechanism.

The Belt Shifter.

This device simplifies throwing off and replacing the belt. To throw off the belt, move the belt shifter to the left (see Fig. 17), working the treadle at the same time. To replace the belt, work the treadle slowly, with the band wheel



band wheel Fig. 17. turning towards you; a revolution or two of the wheel will bring the belt back into its place.

HINTS.

Machine Working Heavily.—If, after standing for some time, the machine works heavily, use a little paraffin in place of oil. Then run the machine rapidly to clean the bearings, thereafter oiling with Singer superior machine oil. The use of inferior oil is usually the cause of a machine working heavily. See that the leather belt is not too tight; it should be just tight enough not to slip. If too long, shorten and rejoin.

Skip Stitches.—A bent or blunt-pointed needle is often the cause of this. See that the needle is accurately set (see page 6). Remove the throat plate, and, after seeing that the feed (3, Fig. 4) is clean and working freely, replace the throat plate.

Thread Breaking.—If the needle thread breaks, this is probably due to one of the following causes:—

The machine being improperly threaded.

The tensions being too tight.

The needle being bent or having a blunt point.

The thread being too coarse for the size of the needle (see Table on inside of back cover).

The thread take-up spring (6, Fig. 5) being broken.

If the under thread breaks, adjust the under tension (see page 12); also see that the inside of the bobbin case and under the tension spring are quite free from fluff. Needles Breaking.—See that the needle is not bent, that the top tension is not too tight, and avoid pulling the material when stitching. Any of these errors will cause the needle to strike on the throat plate and break. Use Singer Needles, sold only at Singer Shops and by the Company's authorised representatives. Other makes of needles are often of inferior quality; they become blunt and break easily, and prevent the efficient working of the machine.

Inferior needles and thread are often causes of breaking. The eye in Singer needles is specially finished to prevent cutting of thread, while the best thread resists strain and is free from knots. Singer Shops sell the best machine sewing thread.

Material Puckering.—This is generally due to irregular tensions. See page 12 for the regulation of tensions.

Stitches Looping.—This is regulated by the tensions (see page 12). See that both the bobbin case and the needle are properly threaded, and that the thread used is of good quality and the correct size for the needle (see Table on inside of back cover). See that the thread take-up spring (6, Fig. 5) is not broken.

Advice is given free at all Singer Shops as to the proper adjustment of machines.

Free instruction is always willingly given in the use of any Singer machine and its attachments at any Singer Shop, no matter where the machine may have been purchased.

Every description of Sewing Machine Repaired, or Exchanged.

INSTRUCTIONS

FOR USING

ATTACHMENTS

WHICH MAY BE APPLIED TO

SINGER MACHINES

No. 99

NOTE.—To apply these attachments, first remove the presser foot from the machine.

Darning by sewing machine is infinitely neater, stronger, and more quickly done than by hand.

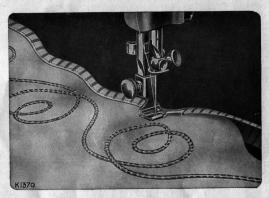
A tiresome task becomes a pleasure!

Read how to do this in separate pamphlet, Form 1001 ad 33, which may be obtained from any Singer Shop or Singer Salesman.

The Binder-Binding.

Raise the needle and fit the binder, as shown.

Pass the binding through the scroll of the binder and draw it under the needle. Place the edge of



the material to be bound between the scroll of the binder and under the needle, lower the presser-bar lifter and sew as usual.

Bias binding should be cut $\frac{15}{16}$ of an inch wide.

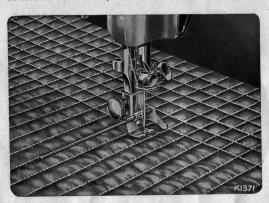
To Bind with Dress Braid.—Proceed as when using bias binding; the only difference is, dress braid being narrower, the edges are not turned under, as is the case with bias binding.

To make French Folds.—Proceed as directed for binding, but pass the cloth beneath the binderfoot, so that the fold is stitched on to the face of the material instead of on the edge.

The Quilter.

Raise the needle and fit the quilter, as shown.

The quilter guide can be used at either the right or left of the needle, and the distance of the guide

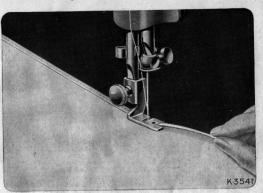


from the needle determines the width between the rows of stitching. Slide the wire into the holder prepared for it on the foot, and set it to the width desired; then lower the foot on to the material.

To Quilt.—For the first row of stitching, let the quilter guide follow the edge of the material, a straight crease, or a line, as preferred. The succeeding rows are made straight and at a uniform distance by keeping the previous row steadily under the guide, as shown.

The Foot Hemmer-Hemming.

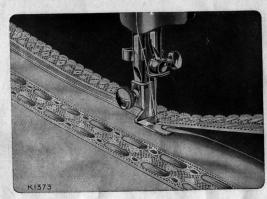
Raise the needle and fit the foot hemmer, as shown. Clip off the right hand corner of the material so that its edge will curl easily. Then, with the



hemmer foot raised, place the material from left to right under the foot and, with its edge slightly raised, insert the corner into the mouth of the hemmer, easing it along until it fills the curl and reaches the needle. Lower the foot and make the first few stitches slowly. Guide the material with the thumb and forefinger of the right hand, so that the edge lies flat over the top of the hemmer, and proceed to sew, taking care to keep the hemmer curl just full. Should the edge begin to run out, move the hand to the right; should too much material run in, move to the left.

Hemming and Sewing on Lace in One Operation.

Start the hem, as explained on page 21, and, when it is well started, raise the needle to its highest

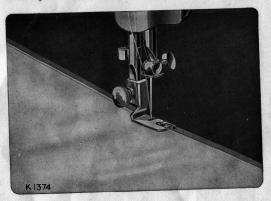


point. Raise the hemmer to relieve the pressure on the hem, and pass the end of the lace through the slot in the side of the attachment and over the hem, as shown.

Take care that the hem is not displaced in the hemmer, and that the needle goes through both lace and hem. Then let down the presser bar, and guide the lace over the front of the hemmer, taking care to keep it well into the slot.

The Foot Hemmer-Felling.

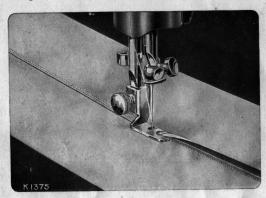
The two pieces of cloth should be laid wrong side out, one over the other, with the edge of the under piece a little farther to the right than the



upper piece, as shown in the illustration. Stitch the two pieces together, using the front projecting part of the hemmer as a guide for keeping the seam straight. The seam should be made close, but not too near to the edge of the upper piece, or the cloth will give way at the seam when a strain is put upon it.

The Foot Hemmer—Felling—Continued.

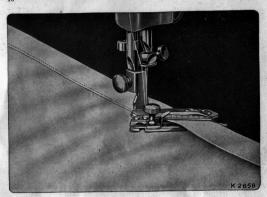
Raise the hemmer foot and open the work out flat, wrong side up, so that the edges will stand up straight. Then push the edges at the beginning of



the seam into the mouth of the hemmer, as far as the needle, and lower the hemmer foot. While stitching, keep the material perfectly flat, using both hands, and see that the seam is in line with the mouth of the hemmer. For the second seam, the stitch should be lengthened slightly.

The Adjustable Hemmer.

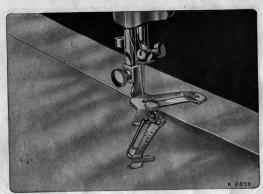
Raise the needle and fit the adjustable hemmer, as shown. This attachment will make hems from $\frac{3}{16}$ inch to 1 inch wide.



Loosen the thumb screw at the front of the hemmer and move the slide to the right or left until the small pointer is against the desired width; then tighten the screw. Insert the edge of the cloth between the slide and the number gauge, at their end, and draw it backward and forward until the hem is formed, stopping with the end of the cloth under the needle. Lower the presser bar lifter and commence to sew, taking care to so guide the cloth as to keep the hemmer full. Felling can also be done with this hemmer by following the instructions on pages 23 and 24.

The Adjustable Hemmer—Wide Hemming.

To make a hem more than one inch wide, loosen the thumb screw and draw the slide to the right as



far as it will go, then turn this part towards you, as shown in the illustration.

Fold and crease down a hem of the desired width, pass the fold under the extension at the right of the hemmer, insert the edge of the material into the folder, as shown, and proceed to stitch.

The Under Braider-Braiding.

Raise the needle and fit the quilter foot, as shown.

To attach the under braider, insert the downwardly projecting hook of the attachment into the

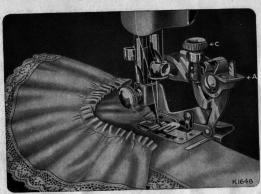


hole in the throat plate at the right of the feed dog. Then place the guide thumb screw in the slot of the attachment and into the hole in the bed plate of the machine. The under braider must be firmly secured by tightening the screw.

The pattern or design to be braided must be stamped or traced on the wrong side of the material. Pass the braid from the left between the blued guide and the lower plate until it enters the back and front braid guides, and then under the needle. Place the material, wrong side up, above the braid, lower the presser foot and proceed to sew, following the lines of the design.

The Ruffler-Ruffling.

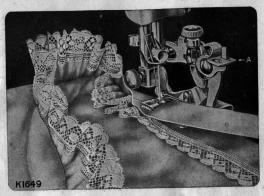
Raise the needle and thread same, then attach the ruffler, taking care to connect the lever with the needle clamp, as shown.



To make a gather at every stitch, insert the small post into slot 1 of lever "A." Pass the edge of the material under the prong at the front of the ruffler and between the two blued blades until it is slightly past the needle; lower the presser bar lifter and proceed to sew. To make a finer gather, shorten the stitch, and shorten the stroke of the ruffling blade by raising the thumb screw "C." To make a fuller gather, lower the thumb screw and lengthen the stitch. By varying these adjustments, many pleasing varieties of work can be accomplished with the ruffler.

The Ruffler— Ruffling between Two Pieces of Material.

Place the lower piece of material below the ruffler. Insert the piece to be ruffled in the ruffler,



as instructed on the preceding page, and pass the upper piece of material above the blued blades in the manner illustrated.

To Ruffle and Sew on at One Operation.

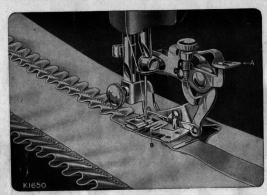
Place the material below the ruffler, and the piece to be ruffled between the blued blades; then proceed as in ruffling.

Apply a little oil to the wearing parts of the ruffler before using.

CAUTION.—The ruffler should never, under any circumstances, be operated without cloth between the blued blades.

Five-Stitch Ruffling or Pleating.

To make a five-stitch ruffle or pleat, insert the small post into slot 5 of lever "A," as shown. The ruffling blade will then move forward and

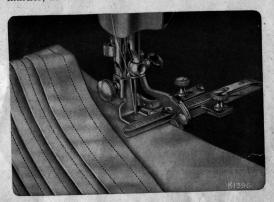


back once at every fifth stitch. Finer or fuller pleats may be obtained by merely altering the length of stitch.

To make Pleated Trimming.—Insert a narrow tape or ribbon through one or both of the slots in the small guide "B" and beneath the presser and needle, so that it lies centrally over the material to be pleated.

The Tuckmarker.

Raise the needle to its highest point, remove the presser foot from the machine and fit the tuckmarker, as shown in the illustration.



It will be noticed that the tuckmarker has two figured scales, the double flat spring in front being marked in eighths of an inch and the small clip in the centre in sixteenths of an inch.

The scale on the small clip in the centre of the attachment determines the width of the tuck to be made. For instance, if the width of tuck required is $\frac{1}{4}$ inch, loosen the thumb screw at the back of the tuckmarker and slide the small guide either to the right or left until its straight edge is over the figure 2, then tighten the thumb screw.

By loosening the thumb screw nearest you, the double flat spring in front may be moved either to the right or left to give the desired width between the lines of stitching. For instance, if 1 inch tucks are to be made, and it be desired to leave 1 inch clear space between each tuck, the flat spring should be moved until the figure 3 is exactly in line with the needle hole; or if no space is required between the tucks, then the figure 2 should be in line with the needle hole. When the required width is obtained tighten the thumb screw.

To operate the tuckmarker is exceedingly simple. Fold the material by hand and place it in the attachment by passing the folded edge over the upright marking point (which will be found at the left hand end of the flat bar below the double flat spring, already referred to); then between the small clip at the centre and below the foot, taking care that the end of the material is over the feed. The small lever on the top of the tuckmarker must also be down in position, as shown in the illustration, and the edge of the fold right against the small guide. Now lower the presser bar lifter and sew as usual, being careful to keep the folded edge against the guide. When the first tuck is completed, it will be seen that the material is creased ready for the second tuck. Fold the material at the crease and, with its plain side uppermost, proceed as before. When making the last tuck, raise the marking lever so that it does not press on the double flat spring; while it is in this position no crease for a succeeding tuck can be made in the material.

RELATIVE SIZES OF NEEDLES AND THREADS

(Class and Variety of Needles used 15 x 1)

Sizes of Needles	CLASS OF WORK TO SEW	Sizes of Cotton, Linen or Silk
9	Very thin Muslin, Cambric, Linen, etc.	100 to 150 Cotton 30 Silk.
11	Very fine Calicoes, Linens, Shirtings, Fine Silk Goods etc.	80 to 100 Cotton 24 to 30 Silk.
14	Shirtings Sheetings, Bleached Calicose, Mus- lins, Silk and General Domestic Goods, and all classes of general work.	60 to 80 Cotton 20 Silk.
16	All kinds of heavy Calicoes, Light Woollen Goods, Heavy Silk,	40 to 60 Cotton 16 to 18 Silk
	Tickings, Woollen Goods, Trousers Boys Clothing, Corsets, Cloaks, Mantles, etc.	30 to 40 Cutton 10 to 12 Silk.
19	Heavy Woollens, Tickings, Bags, Heavy Coats, Trousers, etc. Heavy Clothing generally.	24 to 30 Cotton 60 to 80 Linen.
21	Bags, Coarse Cloths, Heavy Goods of any texture.	40 to 60 Linen, or very coarse Cotton.

In sending orders, always specify the size required.

